RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/573,369 _____

Source: _____ JFWO _____

Date Processed by STIC: _____ 01/25/2007 _____

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IFWO

RAW SEQUENCE LISTING   DATE: 01/25/2007
PATENT APPLICATION: US/10/573,369   TIME: 11:59:35

Input Set : F:\ARS-126-SEQ LIST.txt
Output Set: N:\CRF4\01252007\J573369.raw

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      3 <110> APPLICANT: Applied Research Systems ARS Holding N.V.
      5 <120> TITLE OF INVENTION: Novel leader sequences for use in production of proteins
      7 <130> FILE REFERENCE: 884 WO
C-->  9 <140> CURRENT APPLICATION NUMBER: US/10/573,369
C-->  9 <141> CURRENT FILING DATE: 2006-03-24
      9 <160> NUMBER OF SEQ ID NOS: 58
     11 <170> SOFTWARE: PatentIn version 3.1
     13 <210> SEQ ID NO: 1
     14 <211> LENGTH: 29
     15 <212> TYPE: PRT
     16 <213> ORGANISM: Artificial
     18 <220> FEATURE:
     19 <221> NAME/KEY: source
     20 <223> OTHER INFORMATION: /note="Description of artificial sequence: IgSP-tPA pre-
propeptide"
     22 <220> FEATURE:
     23 <221> NAME/KEY: SIGNAL
     24 <222> LOCATION: (1)..(19)
     25 <223> OTHER INFORMATION: murine immunoglobulin signal peptide
     28 <220> FEATURE:
     29 <221> NAME/KEY: PROPEP
     30 <222> LOCATION: (20)..(29)
     31 <223> OTHER INFORMATION: human tissue plasminogen activator propeptide
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     36 Met Lys Cys Ser Trp Val Ile Phe Phe Leu Met Ala Val Val Thr Gly
     37 1               5                   10                  15
     40 Val Asn Ser Ser Gln Glu Ile His Ala Arg Phe Arg Arg
     41             20                  25
     44 <210> SEQ ID NO: 2
     45 <211> LENGTH: 35
     46 <212> TYPE: PRT
     47 <213> ORGANISM: Homo sapiens
     49 <400> SEQUENCE: 2
     51 Met Asp Ala Met Lys Arg Gly Leu Cys Cys Val Leu Leu Leu Cys Gly
     52 1               5                   10                  15
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     56              20                  25                  30
     59 Gly Ala Arg
     60         35
     63 <210> SEQ ID NO: 3
     64 <211> LENGTH: 19
     65 <212> TYPE: PRT
     66 <213> ORGANISM: Mus musculus
     68 <220> FEATURE:
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       70 <222> LOCATION: (1)..(19)
       71 <223> OTHER INFORMATION:
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       76 1               5                   10                  15
       79 Val Asn Ser
       83 <210> SEQ ID NO: 4
       84 <211> LENGTH: 26
       85 <212> TYPE: PRT
       86 <213> ORGANISM: Homo sapiens
       88 <220> FEATURE:
       89 <221> NAME/KEY: SIGNAL
       90 <222> LOCATION: (1)..(26)
       91 <223> OTHER INFORMATION:
W-->   93 <400> 4
       95 Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
       96 1               5                   10                  15
       99 Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala
      100             20                  25
      103 <210> SEQ ID NO: 5
      104 <211> LENGTH: 17
      105 <212> TYPE: PRT
      106 <213> ORGANISM: Homo sapiens
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      109 <221> NAME/KEY: SIGNAL
      110 <222> LOCATION: (1)..(17)
      111 <223> OTHER INFORMATION:
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      119 Gly
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      124 <211> LENGTH: 87
      125 <212> TYPE: DNA
      126 <213> ORGANISM: Artificial
      128 <220> FEATURE:
      129 <221> NAME/KEY: source
      130 <223> OTHER INFORMATION: /note="Description of artificial sequence: nucleic acid
encoding IgSP-tPA pre-propeptide"
      132 <400> SEQUENCE: 6
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      135 caggagatcc acgccaggtt ccgcaga                                          87
      138 <210> SEQ ID NO: 7
      139 <211> LENGTH: 105
      140 <212> TYPE: DNA
      141 <213> ORGANISM: Homo sapiens
      143 <400> SEQUENCE: 7
      144 atggacgcca tgaagcgcgg cctgtgctgc gtgctgctgc tgtgcggcgc cgtgttcgtg     60
      146 agccccagcc aggagatcca cgccaggttc cgcagaggcg ccaga                    105
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150 <211> LENGTH: 57
151 <212> TYPE: DNA
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154 <400> SEQUENCE: 8
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158 <210> SEQ ID NO: 9
159 <211> LENGTH: 161
160 <212> TYPE: PRT
161 <213> ORGANISM: Homo sapiens
163 <400> SEQUENCE: 9
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166 1               5                   10                  15
169 Ile Cys Cys Thr Lys Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys
170             20                  25                  30
173 Pro Gly Pro Gly Gln Asp Thr Asp Cys Arg Glu Cys Glu Ser Gly Ser
174             35                  40                  45
177 Phe Thr Ala Ser Glu Asn His Leu Arg His Cys Leu Ser Cys Ser Lys
178     50                  55                  60
181 Cys Arg Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val Asp
182 65                  70                  75                  80
185 Arg Asp Thr Val Cys Gly Cys Arg Lys Asn Gln Tyr Arg His Tyr Trp
186             85                  90                  95
189 Ser Glu Asn Leu Phe Gln Cys Phe Asn Cys Ser Leu Cys Leu Asn Gly
190             100                 105                 110
193 Thr Val His Leu Ser Cys Gln Glu Lys Gln Asn Thr Val Cys Thr Cys
194         115                 120                 125
197 His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys Val Ser Cys Ser Asn
198     130                 135                 140
201 Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys Leu Pro Gln Ile Glu
202 145                 150                 155                 160
205 Asn
209 <210> SEQ ID NO: 10
210 <211> LENGTH: 239
211 <212> TYPE: PRT
212 <213> ORGANISM: Homo sapiens
214 <400> SEQUENCE: 10
216 Met Leu Leu Ser Gln Asn Ala Phe Ile Val Arg Ser Leu Asn Leu Val
217 1               5                   10                  15
220 Leu Met Val Tyr Ile Ser Leu Val Phe Gly Ile Ser Tyr Asp Ser Pro
221             20                  25                  30
224 Asp Tyr Thr Asp Glu Ser Cys Thr Phe Lys Ile Ser Leu Arg Asn Phe
225             35                  40                  45
228 Arg Ser Ile Leu Ser Trp Glu Leu Lys Asn His Ser Ile Val Pro Thr
229     50                  55                  60
232 His Tyr Thr Leu Leu Tyr Thr Ile Met Ser Lys Pro Glu Asp Leu Lys
233 65                  70                  75                  80
236 Val Val Lys Asn Cys Ala Asn Thr Thr Arg Ser Phe Cys Asp Leu Thr
237             85                  90                  95
```

```
240 Asp Glu Trp Arg Ser Thr His Glu Ala Tyr Val Thr Val Leu Glu Gly
241         100                 105             110
244 Phe Ser Gly Asn Thr Thr Leu Phe Ser Cys Ser His Asn Phe Trp Leu
245         115                 120             125
248 Ala Ile Asp Met Ser Phe Glu Pro Pro Glu Phe Glu Ile Val Gly Phe
249     130                 135             140
252 Thr Asn His Ile Asn Val Met Val Lys Phe Pro Ser Ile Val Glu Glu
253 145             150                 155                 160
256 Glu Leu Gln Phe Asp Leu Ser Leu Val Ile Glu Glu Gln Ser Glu Gly
257             165                 170                 175
260 Ile Val Lys Lys His Lys Pro Glu Ile Lys Gly Asn Met Ser Gly Asn
261         180             185                 190
264 Phe Thr Tyr Ile Ile Asp Lys Leu Ile Pro Asn Thr Asn Tyr Cys Val
265         195                 200                 205
268 Ser Val Tyr Leu Glu His Ser Asp Glu Gln Ala Val Ile Lys Ser Pro
269     210                 215                 220
272 Leu Lys Cys Thr Leu Leu Pro Pro Gly Gln Glu Ser Glu Phe Ser
273 225                 230                 235
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277 <211> LENGTH: 34
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial
281 <220> FEATURE:
282 <221> NAME/KEY: source
283 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
285 <400> SEQUENCE: 11
286 tgctctagag cgtcacccct agagtcgagc tgtg                            34
289 <210> SEQ ID NO: 12
290 <211> LENGTH: 59
291 <212> TYPE: DNA
292 <213> ORGANISM: Artificial
294 <220> FEATURE:
295 <221> NAME/KEY: source
296 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
298 <400> SEQUENCE: 12
299 ggcgttgagc ggccgcggtt catgacgcta gcaccgaatt cacccctgta accactgcc   59
302 <210> SEQ ID NO: 13
303 <211> LENGTH: 51
304 <212> TYPE: DNA
305 <213> ORGANISM: Artificial
307 <220> FEATURE:
308 <221> NAME/KEY: source
309 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
311 <400> SEQUENCE: 13
312 cgcagatctg gtctcgcatg aagtgcagct gggtgatctt cttcctgatg g           51
315 <210> SEQ ID NO: 14
316 <211> LENGTH: 43
317 <212> TYPE: DNA
318 <213> ORGANISM: Artificial
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320 <220> FEATURE:
321 <221> NAME/KEY: source
322 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
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328 <210> SEQ ID NO: 15
329 <211> LENGTH: 52
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial
333 <220> FEATURE:
334 <221> NAME/KEY: source
335 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
337 <400> SEQUENCE: 15
338 caagtacatc caccctcaga acaacagcat ctgctgcacc aagtgccaca ag           52
341 <210> SEQ ID NO: 16
342 <211> LENGTH: 26
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial
346 <220> FEATURE:
347 <221> NAME/KEY: source
348 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
350 <400> SEQUENCE: 16
351 ggcacctacc tgtacaacga ctgccc                                        26
354 <210> SEQ ID NO: 17
355 <211> LENGTH: 51
356 <212> TYPE: DNA
357 <213> ORGANISM: Artificial
359 <220> FEATURE:
360 <221> NAME/KEY: source
361 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
363 <400> SEQUENCE: 17
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367 <210> SEQ ID NO: 18
368 <211> LENGTH: 48
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial
372 <220> FEATURE:
373 <221> NAME/KEY: source
374 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
376 <400> SEQUENCE: 18
377 ctgttgttct gagggtggat gtacttgccc tgagggcaca cgctgtcg               48
380 <210> SEQ ID NO: 19
381 <211> LENGTH: 48
382 <212> TYPE: DNA
383 <213> ORGANISM: Artificial
385 <220> FEATURE:
386 <221> NAME/KEY: source
387 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
389 <400> SEQUENCE: 19
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/25/2007
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Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:6; Line(s) 130

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,6,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33
Seq#:34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,51,52,53,54,55,56,57,58

VERIFICATION SUMMARY   DATE: 01/25/2007
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L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:73 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:71
L:93 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:91
L:113 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:111